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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/090,499

**Applicant(s)**

DEZONNO ET AL.

**Examiner**

MATTHEW W. GENACK

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on 12 October 2010, PROSECUTION IS HEREBY REOPENED. A new rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Patrick N. Edouard/

Supervisory Patent Examiner, Art Unit 2617

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 5-8, 13-15, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorin et al., "HOW MAY I HELP YOU?", October 1996, AT&T Research, in view of Alpdemir, U.S. Patent Application Publication 2002/0035474, in view of Andersen et al., U.S. Patent No. 6,640,231.

Regarding Claim 1, Gorin et al. discloses a method of processing calls in a call processing center of an organization that processes calls in support of enterprise activities of the organization (there exists a method of processing calls, by an interactive voice system, from a caller who needs help routing a call to a desired destination, according to Page 1 first column, Lines 19-43), such method comprising the steps of:

receiving a query in the form of a natural language sentence about the enterprise activities of the organization from a caller during a call through the call center of the organization (a query in the form of a natural language sentence is received by the interactive voice system, according to Page 2, first column, Lines 2-9, 13, 28, and 43);

forming a natural language answer to the translated query within an artificial intelligence engine by correlating the query against a plurality of answers and selecting the most probable answer of the call center wherein the artificial intelligence engine incorporates the expertise of a live agent and a knowledge universe that comprises the enterprise activities of the organization (a natural language answer to said query is formed by correlating

the query against a plurality of answers and selecting the most probable answer, according to Page 2 first column, Lines 14, 16, 29, 31, 34-39, 44, 46, 48, 57, 59, Page 2 second column, Lines 4 and 7-10, wherein the artificial intelligence engine incorporates the expertise of a live agent in the answers that it provides to the user, whereby the knowledge of the artificial intelligence engine is in the form of a database of transactions that said business conducts, according to Abstract, Page 1 second column, Line 23 to Page 2, second column, Line 12); and

the call center providing the natural language answer to the caller to simulate a natural language conversation with the caller without the use of menu selection (the interactive voice response system simulates a natural language conversation with the user, according to Page 2 first column, Lines 12-16, 27-31, 42-48, 55-60, Page 2 second column, Lines 1-4, whereby this is accomplished without the use of a menu system, according to Page 1 first column, Lines 1-7).

Gorin et al. does not expressly disclose translating the query into voice-extensible mark-up language, nor that the artificial intelligence engine implements second order logic.

Alpdemir discloses translating a query into voice extensible mark-up language (a user's question can then be translated into Voice Extensible Markup Language (VXML) with a speech-to-text (STT) conversion engine, according to [0138] Lines 1-17, Fig. 1).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. by translating the query into voice-extensible mark-up language.

One of ordinary skill in the art would have been motivated to make this modification in order to facilitate the extraction of required information from a database (Alpdemir: [0138]).

Neither Gorin et al. nor Alpdemir expressly disclose an artificial intelligence engine that implements second order logic.

Andersen et al. discloses an artificial intelligence engine that implements second order logic (second-order logic is used in the creation and maintenance of ontologies for a database, according to Abstract, Column 2 Lines 17-41, Column 3 Lines 1-20, Column 10 Lines 1-15, Column 11 Line 65 to Column 12 Line 2, Fig. 1).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir such that the artificial intelligence engine implements second order logic.

One of ordinary skill in the art would have been motivated to make this modification in order to facilitate the creation of new sentences from a given sentence (Andersen et al.: Column 9 Line 51 to Column 10 Line 42).

Claims 8 and 15 differ substantively from Claim 1 in that the former claims disclose an apparatus that the method recited by the latter uses. Gorin

et al. discloses an apparatus that is used by the method of the invention of Gorin et al. (Page 1 first column, Lines 19-21).

Regarding Claim 5, Gorin et al. discloses that the artificial intelligence engine utilizes the expertise and inputs associated with a live agent (a database of customer-human agent interactions is maintained, which the dialog system uses to mimic a live agent, according to Abstract).

Regarding Claim 6, Gorin et al. does not expressly disclose that the step of receiving the query further comprises detecting the query within at least one of an html document and an email.

Alpdemir discloses that receiving a query further comprises detecting the query within an html document (a personal computer (PC), personal digital assistant (PDA), or other appliance capable of displaying HTML pages may submit a query to the information center, according to Abstract, [0139] Lines 8-19, Fig. 1).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir as modified by Andersen et al. such that the step of receiving the query further comprises detecting the query within at least one of an html document and an email.

One of ordinary skill in the art would have been motivated to make this modification in order to allow the user to submit the query via the Internet (Alpdemir: [0139]).

Regarding Claim 7, Gorin et al. discloses that the artificial intelligence engine knowledge universe is limited to only the enterprise activities of the organization enabling the artificial intelligence engine to generalize otherwise indeterminate inquiries (the database consists of 10,000 fluently spoken transactions between customers and human agents, according to Abstract, whereby indeterminate inquiries may be generalized, according to Page 2 first column, Lines 12-16, 27-31, 42-48, 55-60, Page 2 second column, Lines 1-4).

Claim 13 does not differ substantively from Claim 6, and is therefore rejected on the same grounds as the latter.

Regarding Claim 14, neither Gorin et al. nor Alpdemir expressly discloses that the artificial intelligence engine implements a subset of second order logic.

Andersen et al. discloses that an artificial intelligence engine implements a subset of second order logic (an Ontology Works Language (OWL) is a subset of the Knowledge Interchange Format (KIF) language, according to Column 8 Lines 21-32, whereby KIF language includes second order logic, according to Column 10 Lines 43-63).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir as modified by Andersen et al. such that the artificial intelligence engine implements a subset of second order logic.

One of ordinary skill in the art would have been motivated to make this modification in order to provide upward compatibility (Andersen et al: Column 8 Lines 21-32).



Regarding Claim 18, Gorin et al. discloses that all calls to the call processing center are routed to the interpreter and wherein only exceptional calls are re-routed to a live agent (all calls are connected to the interactive voice system, whereby only certain calls are redirected to a live agent, according to Page 1 first column Line 32 to Page 1 second column Line 2).

Regarding Claim 19, Gorin et al. does not expressly disclose that the means for receiving the query further comprises a web site adapted to detect the query within an e-mail.

Alpdemir discloses that the means for receiving a query further comprises a web site adapted to detect the query within an e-mail (a query may be submitted via email, according to [0054]).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir as modified by Andersen et al. such that the means for receiving the query further comprises a web site adapted to detect the query within an e-mail.

One of ordinary skill in the art would have been motivated to make this modification in order to enable the inclusion of attachments (Alpdemir: [0054]).

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gorin et al. in view of Alpdemir, further in view of Saylor et al., U.S. Patent No. 6,792,086.

Gorin et al. discloses a method of processing calls in a call processing center of an organization (there exists a method of processing calls, by an

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interactive voice system, from a caller who needs help routing a call to a desired destination, according to Page 1 first column, Lines 19-43), such method comprising the steps of:

the call center of the organization receiving a question in natural language sentence form from a caller during a call (a query in the form of a natural language sentence is received by the interactive voice system, according to Page 2, first column, Lines 2-9, 13, 28, and 43);

determining a natural language answer to the question within the artificial intelligence engine by correlating the question against a plurality of answers and selecting the most probable answer adapted to provide answers subjectively focused on the organization based upon incorporating expertise of a live agent and a knowledge universe limited to an agenda of the organization enabling the artificial intelligence engine to generalize otherwise indeterminate questions (a natural language answer to said query is formed by correlating the query against a plurality of answers and selecting the most probable answer, according to Page 2 first column, Lines 14, 16, 29, 31, 34-39, 44, 46, 48, 57, 59, Page 2 second column, Lines 4 and 7-10, wherein the artificial intelligence engine incorporates the expertise of a live agent in the answers that it provides to the user, whereby the knowledge of the artificial intelligence engine is in the form of a database of transactions that said business conducts, according to Abstract, Page 1 second column, Line 23 to Page 2, second column, Line 12, whereby the database consists of 10,000 fluently spoken transactions between customers and human agents, according to

Abstract, whereby indeterminate inquiries may be generalized, according to Page 2 first column, Lines 12-16, 27-31, 42-48, 55-60, Page 2 second column, Lines 1-4);

the call center providing the natural language answer to the caller in the form of audible speech to simulate a natural language conversation with the caller without use of menu presentation (the interactive voice response system simulates a natural language conversation with the user, according to Page 2 first column, Lines 12-16, 27-31, 42-48, 55-60, Page 2 second column, Lines 1-4, whereby this is accomplished without the use of a menu system, according to Page 1 first column, Lines 1-7).

Gorin et al. does not expressly disclose that the question is text-based, nor converting the text-based question into a metaprogramming language understood by an artificial intelligence engine of the call center, nor that the artificial intelligence engine encodes the answer in VXML code.

Alpdemir discloses that the question is text-based (a personal computer (PC), personal digital assistant (PDA), or other appliance capable of displaying HTML pages may submit a query to the information center, according to Abstract, [0139] Lines 8-19, Fig. 1), and converting the text-based question into a metaprogramming language understood by an artificial intelligence engine of the call center (a user's question can then be translated into Voice Extensible Markup Language (VXML), according to [0138] Lines 1-17, Fig. 1).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. such that the

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question is text-based, and by converting the text-based question into a metaprogramming language understood by an artificial intelligence engine of the call center.

One of ordinary skill in the art would have been motivated to make this modification in order to facilitate the extraction of required information from a database (Alpdemir: [0138]).

Neither Gorin et al. nor Alpdemir expressly disclose that the artificial intelligence engine encodes the answer in VXML code.

Saylor et al. discloses that an artificial intelligence engine encodes the answer in VXML code (VXML information that is an answer to a submitted question may be passed through a TTS in order to create a sound file that is subsequently played for the user, according to Column 8 Lines 16-34; alternatively, the VXML information may delivered to the user as a text file, according Column 8 Lines 34-38).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir such that the artificial intelligence engine encodes the answer in VXML code.

One of ordinary skill in the art would have been motivated to make this modification because the customer may be using a device that is more suited to receiving an answer in extensible markup language form than in the form of synthesized speech.

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5. Claims 2, 9, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorin et al., "HOW MAY I HELP YOU?", October 1996, AT&T Research, in view of Alpdemir, further in view of Andersen et al., further in view of Gavan et al., U.S. Patent No. 6,601,048, further in view of Dezonmo, U.S. Patent No. 6,233,333.

Gorin et al. discloses enabling the artificial intelligence engine to draw inferences to form a context for forming the answer to the query (inferences are made based on user behaviors such as silence after the system asks the user a question, according to Page 2 first column, Lines 12-16, 27-31, 42-48, 55-60, Page 2 second column, Lines 1-4).

Neither Gorin et al., nor Alpdemir, nor Andersen et al. expressly disclose that the artificial intelligence engine utilizes a caller call record including identity and contact history, wherein the caller call record and a second call are delivered to the artificial intelligence engine at substantially the same time.

Gavan et al. discloses that an artificial intelligence engine utilizes a caller call record including identity and contact history (, in the context of telecommunications fraud detection, artificial intelligence is used to monitor event records that are stored in a call history database, said records containing information pertaining to the identity of the caller and the called parties, according to Column 3 Lines 38-64, Column 11 Lines 4-65, Figs. 2 and 4).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified

by Alpdemir as modified by Andersen et al. such that the artificial intelligence engine utilizes a caller call record including identity and contact history.

One of ordinary skill in the art would have been motivated to make this modification so as to provide a less rigid system of pattern analysis in the processing of a telecommunications traffic (Gavan et al.: Column 2 Lines 6-15).

Neither Gorin et al., nor Alpdemir, nor Andersen et al., nor Gavan et al. expressly discloses that the caller call record and a second call are delivered to the artificial intelligence engine at substantially the same time.

Dezonmo discloses that a caller call record and a second call are delivered to an artificial intelligence engine at substantially the same time (there exists an apparatus and method for identifying a call record that is to be delivered from one automatic call distributor to another automatic call distributor, according to Abstract, Column 2 Line 60 to Column 3 Line 13, Figs. 1-2, whereby customer records for a caller, and said caller's call, are delivered to a selected agent simultaneously, according to Column 7 Lines 30-44).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir as modified by Andersen et al. as modified by Gavan et al. such that the caller call record and a second call are delivered to the artificial intelligence engine at substantially the same time.

One of ordinary skill in the art would have been motivated to make this modification in order to expedite the handling of the call (Dezonmo: Column 7 Line 55 to Column 8 Line 3).

6. Claims 3, 10-11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gorin et al. in view of Alpdemir, further in view of Andersen et al., further in view of Saylor et al.

Regarding Claims 3 and 10, neither Gorin et al., nor Alpdemir, nor Andersen et al. expressly discloses that the step of forming an answer further comprises forming the answer in the form of VXML code within the AI engine.

Saylor et al. discloses that a step of forming an answer further comprises forming the answer in the form of VXML code within an AI engine (VXML information that is an answer to a submitted question may be passed through a TTS in order to create a sound file that is subsequently played for the user, according to Column 8 Lines 16-34; alternatively, the VXML information may delivered to the user as a text file, according to Column 8 Lines 34-38).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir as modified by Andersen et al. such that that the step of forming an answer further comprises forming the answer in the form of VXML code within the AI engine.

One of ordinary skill in the art would have been motivated to make this modification because the customer may be using a device that is more suited to

receiving an answer in extensible markup language form than in the form of synthesized speech.

Regarding Claim 11, Gorin et al. discloses that the artificial intelligence engine is not measurably objectively accurate in responding to queries (the interactive voice system may misunderstand the user, according to Page 2 first column, Lines 42-48).

Regarding Claim 17, neither Gorin et al., nor Alpdemir, nor Andersen et al. expressly discloses that the artificial intelligence engine forms the answer in VXML code using information from web page documents and incorporates VXML responses into documents that are delivered to the caller in response to the call.

Saylor et al. discloses that an artificial intelligence engine forms an answer in VXML code using information from web page documents and incorporates VXML responses into documents that are delivered to a caller in response to a call (a user calls a call processing center, and said call center processes an information request from said user via a voice browser module that uses speech recognition to interpret the user's request for information, whereby this information may be disseminated by an organization whose purpose is commerce-related, according to Column 3 Lines 36-41, Column 5 Lines 41-42 and 55), whereby the VXML information may delivered to the user as a text file, according to Column 8 Lines 34-38), whereby the VXML information may also be stored as web pages, according to Column 4 Line 46 to Column 5 Line 11).



At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir as modified by Andersen et al. such that the artificial intelligence engine forms the answer in VXML code using information from web page documents and incorporates VXML responses into documents that are delivered to the caller in response to the call.

One of ordinary skill in the art would have been motivated to make this modification because the customer may be using a device that is more suited to receiving an answer in extensible markup language form than in the form of synthesized speech.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gorin et al. in view of Alpdemir, further in view of Andersen et al., further in view of Horowitz et al., U.S. Patent No. 6,349,290.

Gorin et al. discloses the method of processing calls mimics a live agent (Page 2, first column, Lines 12-16, 27-31, 42-48, 55-60, Page 2 second column, Lines 1-4).

Neither Gorin et al., nor Alpdemir, nor Andersen et al. expressly discloses the use of a caller's identity and contact history by an artificial intelligence engine to support enterprise activities.

Horowitz et al. discloses the use of a caller's identity and contact history by an artificial intelligence engine to support enterprise activities (there exists a system and method for the automated, customized presentation of a financial institution's services and products to a customer accessing said

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financial institution's intelligent voice response (IVR) system via telephone, whereby the system makes use of artificial intelligence, according to Abstract, Column 5 Lines 21-38, Column 11 Lines 14-27, Column 23 Line 58 to Column 24 Line 9, Column 29 Lines 1-8, Fig. 6, whereby a call is processed according to the caller's identity and contact history, according to Column 42 Line 53 to Column 43 Line 6, Fig. 35).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir as modified by Andersen et al. by providing the means for the artificial intelligence engine to make use of a caller's identity and contact history to support enterprise activities.

One of ordinary skill in the art would have been motivated to make this modification in order to offer products and services to a customer that match the business's perception of said customer's need (Horowitz et al.: Column 1 Lines 36-62).

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gorin et al. in view of Alpdemir, further in view of Andersen et al., further in view of Saylor et al., further in view of Bigus et al., U.S. Patent Application Publication 2003/0084010.

It is inherent that an artificial intelligence engine used for answering caller's queries [which is what Gorin et al. discloses] would utilize the expertise and inputs associated with a live agent.

Neither Gorin et al., nor Alpdemir, nor Andersen et al., nor Saylor et al. expressly disclose the use of forward and backward chaining by an artificial intelligence engine.

Bigus et al. discloses the use of forward and backward chaining by an artificial intelligence engine in the context of a method wherein product support services are provided to customers (Abstract, [0011]-[0012], [0086]).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Gorin et al. as modified by Alpdemir, as modified by Andersen et al., as modified by Saylor et al. by providing for the use of forward and backward chaining by an artificial intelligence engine.

One of ordinary skill in the art would have been motivated to make this modification in order to facilitate the identification, by the artificial intelligence engine, of recurring patterns that indicate an undesirable operational condition in the process of aiding a customer (Bigus et al.: [0087]).

### ***Response to Arguments***

9. Applicant's arguments, filed 12 October 2010, with respect to the use of Alpdemir have been fully considered and are persuasive. The use of Alpdemir for the traversed subject matter has been withdrawn.

10. Applicant's arguments filed 12 October 2010 have been fully considered but they are not persuasive.

Applicant asserts, on Page 12 of the Appeal Brief, that "Gorin does not teach the use of artificial intelligence to determine natural language answers to

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queries. Gorin concerns automatic routing, and uses natural language recognition, prompts, and form filling to determine the call type for call routing but does not use AI incorporating live agent expertise, or attempt to answer users [sic] queries. ... Further, Gorin does not mention use of an artificial intelligence engine. Thus, Gorin does not teach use of artificial intelligence to simulate a natural language conversation. The Final Office Action, conceding that Gorin does not mention AI, asserts that Gorin's system is functionally an AI engine (p. 17, lines 12-19). However, the only support provided is examples of natural language phrases. This, however, only establishes use of speech recognition in the limited system described which merely tries to recognize [sic] a limited number of predetermined service requests for routing purposes. Thus is not [sic] a description of AI engine functionality. Gorin does not mention AI because it does not use AI and does not need it. In addition, Gorin does not use or have a need to use the expertise of a live agent." On the contrary, Gorin et al. provides several examples of conversations between a machine and a human user, whereby said machine mimics a human live agent by providing natural language answers to the human user's questions. One example involves the human user querying the machine for the area code for Chicago, with the machine answering by providing the area code for Chicago. Artificial intelligence is defined as "The ability of a computer or other machine to perform actions thought to require intelligence. Among these actions are logical deduction and inference, creativity, the ability to make decisions based on past experience or insufficient or conflicting information, and the ability to understand spoken language."

[<http://dictionary.reference.com/browse/artificial+intelligence>] Clearly, the machine disclosed by Gorin et al. not only understands spoken language, but also performs actions related to this understanding of spoken language, such as deduction and inference (e.g., when the machine ascertains what information is being solicited by the human user based on said human user's spoken words) as well as decision-making (e.g., deciding what the correct answer is and providing that information to the human user). Clearly, the machine disclosed by Gorin et al. is an AI engine that mimics the expertise of a live agent.

Applicant asserts, on Page 15 of the Appeal Brief, that "Dezonno [sic] delivers the call to the agent 18C and the records to a terminal display 22C. Thus, they are delivered to two different destinations, not to a single engine or location (i.e., artificial intelligence engine). Gavan merely teaches use of multiple items. Thus, neither reference [Gavan et al. and Dezonmo] teaches delivery of a call and call records to the same location, or to an AI engine." On the contrary, Dezonmo states "When the call is subsequently delivered to a selected agent 18C, the call record may now be used to simultaneously deliver customer records to the terminal display 22C of the selected agent 18C." [emphasis added]. Delivering a call to an agent and customer records to the terminal display of said agent does not constitute delivering the call and the records to two different locations. Rather, such an action constitutes delivering two different types of information to the respective appropriate output devices at the same location, since it is clear that the terminal display of the selected agent is at the same location as said selected agent.

Applicant asserts, on Page 15 of the Appeal Brief, that "claims 2, 9, and 15 call for use [sic] of call records to form a context for forming answers to the caller queries. Alpdemir and Gorin do not disclose an AI engine forming a context for answering queries or for drawing inferences." On the contrary, the four sample conversations of Gorin et al., on Page 2, first column, Lines 12-16, 27-31, 42-48, and 55 to second column Line 4, entail queries from human users, whereby inferences are used by the machine to form contexts (such as area code searching, wrong number dialing, or billing) in which answers to said queries are found. Furthermore, the last example makes use of a call record in that the human user provides a previously dialed telephone number that happened to be the wrong number, whereby the machine infers that a credit for said wrong number call is being sought by the human user (based on the user's silence after the machine states "You need a billing credit.") and informs the user that a credit will be given after the user informs the machine that the call was made from the phone that the current call is from. Clearly, the machine constitutes an AI engine due to the ability to understand spoken language, make inferences, and form contexts for answering questions from human users.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW W. GENACK whose telephone number is (571)272-7541. The examiner can normally be reached on 9 AM to 5 PM Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Matthew W Genack/

Examiner, Art Unit 2617

/Patrick N. Edouard/

Supervisory Patent Examiner, Art Unit 2617